

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2012-177-WS - ORDER NO. 2013-____
FEBRUARY ____, 2013

IN RE:	Application of Tega Cay Water Service, Inc.)	ORDER APPROVING
	for Adjustment of Rates and Charges)	RATES AND CHARGES
	and Modification of Certain Terms and)	
	Conditions for the Provision of Water and)	
	Sewer Service)	

I. INTRODUCTION

This matter is before the Public Service Commission of South Carolina ("Commission") on the Application of Tega Cay Water Service, Inc. ("Tega Cay" or "Company") for approval of a new schedule of rates and charges and modifications to certain terms and conditions for the provision of water and sewer services for its customers in South Carolina. Tega Cay filed its Application on August 8, 2012, pursuant to S.C. Code Ann. § 58-5-240 and 26 S.C. Code Ann. Regs. RR. 103-503 (1976), 103-703, 103-512.4.A and 103-712.4.A (1976).

By correspondence, the Commission's Docketing Department instructed Tega Cay to publish a prepared Notice of Filing and Hearing one time, in a newspaper of general circulation in the area affected by Tega Cay's Application and to mail copies of the Notice of Filing and Hearing to all customers affected by the proposed rates and charges and modifications. The Notice of Filing and Hearing indicated the nature of the Application, the date of the hearing, and advised all interested parties desiring to participate in the scheduled proceeding of the manner and time in which to file the appropriate pleadings. Tega Cay filed affidavits showing that it had complied

with the Docketing Department's instructions. The Notice of Filing and Hearing was published in the Rock Hill Herald on August 30, 2012, and mailed to the Company's customers on August 24, 2012.

The Commission received letters of protest from six hundred eighty-two (682) letters of protest. The South Carolina Office of Regulatory Staff ("ORS"), a party of record pursuant to S.C. Code Ann. § 58-4-10(B), made on-site investigations of Tega Cay facilities, audited Tega Cay's books and records, issued data requests, and gathered other detailed information concerning Tega Cay's operations.

The Commission held a public hearing in Tega Cay, South Carolina, for the purpose of allowing Tega Cay's customers to present their views regarding the Application. The Commission also permitted public witnesses to testify at the hearing on January 8, 2013 in Columbia.¹ Thereafter, on January 8, 2013, at 10:00 a.m., an evidentiary hearing was convened before the Commission in its offices in Columbia with the Honorable David A. Wright presiding. Tega Cay was represented at the hearing by Charles L. A. Terreni, Scott Elliott, and John M.S. Hoefer. Jeffrey M. Nelson and Shannon Bowyer Hudson, represented the ORS. There were no intervenors.

¹ Pursuant to directions of the Commission's Docketing Department, notice of these hearings was given to affected customers on September 28, 2012 by the Company as reflected in an affidavit filed with the Commission.

The Company presented the direct and/or rebuttal testimony of five (5) witnesses, all employed by its parent company, Utilities, Inc., and assigned in various capacities to Tega Cay: Patrick Flynn, Regional Director; Steven M. Lubertozzi, Executive Director of Regulatory Accounting & Affairs; Mac Mitchell, Regional Manager; Karen Sasic, Director of Billing and Regulatory Relations; Kirsten Markwell, Manager of Regulatory Accounting. The Company also presented the testimony of two expert witnesses on rate of return, Pauline M. Ahern, CRRA, Principal of AUS Consultants and Dylan W. D'Ascendis, CRRA, Associate of AUS Consultants.

The ORS presented the direct and surrebuttal testimony of its employees Willie J. Morgan, P.E., Program Manager for its Water and Wastewater Department; Christina L. Seale, Auditor in the Audit Department; and Dr. Douglas H. Carlisle, Jr., Economist. The evidentiary hearing was completed on January 9, 2013.

The Commission must consider competing interests to arrive at just and reasonable rates for the Company. These competing interests are those of the ratepayer and those of the utility, which has the right to earn a fair return. S.C. Cable Television Ass'n v. Public Serv. Comm'n, 313 S.C. 48, 437 S.E.2d 38 (1993). Rate regulation has two aspects: control of the rate level (earnings) and control of the rate structure (prices). Charles F. Phillips, Jr., *The Regulation of Public Utilities*, (1993) at 171. As to the rate level, public utilities are entitled to cover all allowable operating costs and to have the opportunity to earn a "fair" rate of return. *Id.* Collectively, these items comprise a company's total revenue requirements. *Id.* As to the rate structure, public utilities are permitted to establish rates that, at a minimum, will cover their revenue requirements. *Id.* at 171-72. Such rates must be "just and reasonable," with no "undue"

discrimination. *Id.* at 172.

Thus, in considering the Application of Tega Cay, the Commission must give due consideration to the Company's total revenue requirements, comprised of allowable operating costs and the opportunity to earn a fair rate of return. To this end, the Commission will review the operating revenues and operating expenses of Tega Cay and will endeavor to establish adequate and reasonable levels of revenues and expenses. Further, the Commission will consider a fair rate of return for Tega Cay based upon the record before it. Should the Commission's determination show that rates should be increased, the Commission will then design rates that will meet the revenue requirements of Tega Cay but that are also just and reasonable and free of undue discrimination.

II. PRELIMINARY MATTERS

Tega Cay is entitled to a meaningful opportunity to respond to the testimony of the public witnesses in this docket. Utilities Services of South Carolina, Inc. v. South Carolina Office of Regulatory Staff, 392 S.C. 96, 708 S.E.2d 755 (2011). The Commission granted the Applicant's request to pose its objections to testimony and evidence taken by the Commission at the December 3, 2012, and January 8, 2013, public hearings until after their conclusion. The Commission also allowed the Company to file responsive testimony to the customer testimony given in the public hearings. In response to the public testimony, the Applicant submitted the testimony of Ms. Sasic, Mr. Flynn, and Mr. Mitchell and filed two sets of objection and motions to strike.

1. Motion to Strike Testimony Given on January 8, 2013.

On January 7, 2013, the Applicant filed and served its objections and motion to strike certain testimony taken by the Commission at the public night hearing held December 3, 2012. The ORS generally opposed the Applicant's objections and motions to strike. The grounds for the Company's objections are stated in its motions, and the ORS's responses are articulated in its return(s). The Commission rules on each objection as follows: Tega Cay objects to and moves to strike the testimony of Gene Esarove at Tr. Vol. 2, pp. 214, l. 3 – 215, l. 1 and pp. 216, l. 5 - 217, l. 5. We agree with the Company that the events related by Mr. Esarove, which occurred five or six years ago according to him (see Tr. Vol. 2, p. 216, l. 5-13 and p. 216, l. 14-20), are too remote to be relevant or have probative value in this case and therefore this testimony should be excluded from the record pursuant to SCRE Rules 402 or 403.

Tega Cay objects to and moves to strike the testimony of Shantel Wiley at Tr. Vol. 2, pp. 220, l. 5 - 221, l. 4, and p. 222, l. 1-21, and objects to the introduction of Exhibit No. 9. Ms. Wiley's testimony concerned a newspaper article, introduced as Exhibit 9, about TCWS customer Linda Stevenson and her efforts to organize opposition to the company's proposed rate increase. The Commission finds that this testimony and exhibit are inadmissible hearsay under SCRE Rule 802, and in any case irrelevant to these proceedings and therefore also excludable under SCRE Rule 402.

Tega Cay objects to and moves to strike the testimony of Karen Licausi at Tr. p. 224, l. 3-23, and pp. 226, l. 24 – p. 227, l. 8, as well as hearing Exhibit 10, introduced at Tr. p. 225, l. 1-10. In her testimony, Ms. Licausi relates a conversation with her veterinarian and attempts to ascribe

her dog's illness to water provided by TCWS. Ms. Licausi's testimony and Exhibit No. 10 are inadmissible for several reasons. Ms. Licausi's testimony regarding her conversations with her veterinarian is inadmissible hearsay under SCRE Rule 402, and is also excludable due to its potential for prejudice under SCRE Rule 403. Furthermore, the veterinary records in Exhibit 10 were incomplete and not properly authenticated and are therefore inadmissible under SCRE Rule 901. The records and the handwritten notations of unknown authorship which appear upon them are also inadmissible hearsay under SCRE Rule 402 and inadmissible due to their potential for prejudice under SCRE Rule 403. Furthermore, any opinions Ms. Licausi offered regarding the cause of her dog's medical conditions (see Tr. Vol. 2, p. 224, l. 13-23) is inadmissible under SCRE Rule 701. Ms. Licausi offered the Commission no evidence of training or expertise which would qualify her to draw the conclusions regarding her dog's purported condition or its causes offered in her testimony.

Tega Cay objects to and moves to strike the testimony of Joyce Clark at Tr. Vol. 2 p. 230, l. 12-25, in which Ms. Clark relates an account of a sewerage spill which was described to her in a note she received in her mailbox. Ms. Clark explained that the author of the note was a neighbor who provided the note after Ms. Clark asked her if "she had something she wanted me to say". Tr. Vol. 2 at pp. 231, l. 18 – 232, l. 3. This testimony is inadmissible hearsay under SCRE Rule 802.

Tega Cay objects to and moves to strike the testimony of Kelly Macaluso at Tr. Vol. 2 pp. 239, l. 16 – 240, l. 9. Tega Cay also objects to the admission of four pages of Exhibit 11 offered by Ms. Macaluso: an article from the March 2012 issue of *American Water Intelligence* about the acquisition of a holding company which is an equity owner in Utilities, Inc., Tega Cay's parent company, and a press release by Corix Utilities regarding the same transaction. This testimony

and the accompanying exhibits which pertain to the financial strategies of parties other than Tega Cay are inadmissible on the following grounds: 1) they are not relevant under SCRE Rule 402; 2) the testimony and exhibits are inadmissible hearsay under SCRE Rule 802; and 3) any probative value that the testimony and exhibits may have is outweighed by their potential for prejudice due to the commentary regarding the financial strategies of the non-regulated investors involved and are inadmissible under SCRE Rule 403.

2. Motion to Strike Testimony Given on December 3, 2012.

Tega Cay makes the following motions in regard to the testimony taken by the Commission in the above referenced docket at the public night hearing held on December 3, 2012.

Tega Cay objects to the introduction of and moves to strike the following testimony of Ms. Linda Stevenson:

- a. Photograph of a sewerage overflow dated February 7, 2010 on slide 1 of Exhibit 1. Ex. p. 5²
- b. Photograph of sewerage overflow dated January 27, 2010 on slide 5 of Exhibit 1. Ex. p. 9.
- c. Photographs of sewerage spill and erosion dated March 25, 2006, at slides 6, 7 and 14 of Exhibit 1, Ex. pp. 10, 11, 18.
- d. Testimony regarding a sanitary sewerage overflow which purportedly took place in March of 2006 at Tr. pp. 34, l. 19 – 35, l. 9.

Tega Cay objects to this testimony and exhibits on the grounds of relevance because the events to which they relate occurred outside of the test year for this case, and are too remote to have probative value. SCRE Rule 402. The Commission agrees. Each of the photographs described above was taken before July 13, 2010, the date on which the Commission held its merits

² The Company Bates numbered the pages of the exhibits offered at the public hearing and attached them to its motion. For ease of reference, the Commission will refer to the Bates references made in the Company's motion.

hearing in TCWS's preceding rate case. See Docket No. 2009-473-WS The three photographs of the sewerage spill of March 25, 2006, listed in item "c" above, were introduced into evidence by Ms. Stevenson in the prior rate case. See Hearing Tr. May 19, 2010, Docket No. 2009-473-WS, p. 85, l. 24 – p. 86, l. 9; p. 11, l. 2-21, and Hearing Exhibit No. 10.

Furthermore, even if found relevant, the events purportedly described by Ms. Stevenson and depicted in the photographs are sufficiently remote in time, that any probative value they may have would be outweighed by the danger of unfair prejudice and confusion of the issues, and therefore the exhibits and testimony are also excludable under SCRE Rule 403.

Tega Cay also objects to and moves to strike the following pages of Ms. Stevenson's Exhibit 1 on the grounds that they are inadmissible hearsay evidence under SCRE Rule 802:

- a. Water and sewer bill on p. 36 of Exhibit 1. There is no testimony to support the relevance or probative value of this exhibit; it should be excluded pursuant to SCRE Rules 402 and 403.
- b. Email correspondence from Paul and Dorinda Wagner at pp. 38-40 of Exhibit 1. This is inadmissible hearsay testimony under SCRE Rule 802.
- c. Email correspondence from George Cole to George Hice at pp. 41-42 of Exhibit 1. This is inadmissible hearsay testimony under SCRE Rule 802.
- d. Email correspondence from Linda Stevenson to Chad Campbell, forwarding email message from George Needham at pp. 43-44. This is inadmissible hearsay testimony under SCRE Rule 802.

The Commission agrees. The above documents are all out of court statements made by witnesses not available for cross examination, and were clearly offered by Ms. Stevenson for the truth of the matters asserted in them. Therefore, they are excludable hearsay under SCRE Rule 802.

Tega Cay objects to the introduction of and moves to strike the seventh page of Steve Kunzman's Public Hearing Exhibit No. 2:

- a. A photograph, which Mr. Kunzman described as submitted by a "concerned citizen" (Tr. p. 53, l. 11). The Commission agrees that the photograph is inadmissible hearsay testimony, and should be excluded pursuant to SCRE Rule 802.
- b. A photograph which purportedly describes an event that took place on March 1, 2009. The Commission agrees that this photograph is not relevant to these proceedings because the event described in the photograph is too remote to have probative value in these proceedings. SCRE Rule 402. Even if found relevant, the event purportedly described by the photograph are sufficiently remote in time, and so devoid of foundational facts, that its probative value is outweighed by the danger of unfair prejudice, confusion of the issues, and its potential to mislead the Commission, and therefore should be excluded pursuant to SCRE Rule 403.

Tega Cay objects to and moves to strike Steve Kunzman's testimony at Tr. p. 55, l. 18-21, which states "During our visit, some of the neighbors came out, and said that it had never really been locked until recently", and on the 16th slide of Mr. Kunzman's Exhibit No. 2 (Ex. p. 65)

which states “During our visit the neighbors said that until recently this was never locked”, on the grounds that these statements are inadmissible hearsay under SCRE Rule 802. The Commission agrees.

Tega Cay objects to and moves to strike Mr. Kunzman’s testimony in which he states: *“These are like tools that, I guess, Utilities, Inc. has made, and they use to resolve their problems with this lift station. They all look homemade and are left on site, which indicated to me, and again, I’m not a professional in this, but it indicates maybe there’s an ongoing problem with the lift station.”* Tr. Vol 1., p. 56, ll. 2-8. Tega Cay also objects to and moves to strike the following statement from the 20th Slide of Mr. Kunzman’s Exhibit No. 2 (Ex. p. 69): *“All look home made and are left at the site which could indicate there is an ongoing problem”*. The Commission finds that these opinions, which Kunzman admitted he was not qualified to make, are inadmissible pursuant to SCRE Rule 701.

Tega Cay objects to and moves to strike the following language on the 25th slide of Exhibit 2 (Ex. p. 74) and Tr. Vol 1. p. 57, l. 1-7.: *“Neighbors have reported seeing the “big trucks” a lot on their street with long hoses going into a manhole”* as inadmissible hearsay pursuant to SCRE Rule 802. The Commission agrees and sustains the objection.

Tega Cay objects to and moves to strike the testimony of Jerry Church concerning the contents of a video that “shows some of the media coverage”. Tr. Vol. 1, pp. 83, l. 17 – 84, l. 6. The Commission finds that the matters related in this testimony, of which Mr. Church had no direct knowledge, are inadmissible hearsay under SCRE Rule 802.

Tega Cay objects to and moves to strike the testimony of Gina Hartmeier comparing her bills to those of her ex-husband at p. 160, 18 – 161, l. 21, and accompanying Exhibit 8 (Ex. p. 131).

The Commission finds that this testimony is inadmissible hearsay pursuant to SCRE Rule 802.

Tega Cay objects to and moves to strike the testimony of Elizabeth Duda at Tr. Vol. 1, pp. 180, l. 18 – 181, l. 9, concerning events which took place on March 1, 2009. The Commission finds that events described are too far removed to be relevant or have probative value in this case and are therefore excludable under SCRE Rule 402 and Rule 403.

Tega Cay objects to and moves to strike the testimony of Elizabeth Duda at pp. 182, l. 24 – 183, l. 9, in which Ms. Duda testified to what Ms. Carrie Thorsby purportedly would have testified to before the Commission had she been present. The Commission finds that this testimony is inadmissible hearsay and should be excluded pursuant to SCRE Rule 802.

IV. FINDINGS OF FACT AND SUPPORTING EVIDENCE

1. Tega Cay provides water service to approximately 1,762 customers and sewer service to approximately 1,744 customers in portions of the oldest part of the Tega Cay community situated on the shores of Lake Wylie in York County, South Carolina. As a public utility, its operations are subject to the jurisdiction of the Commission pursuant to S.C. Code Ann. §§ 58-5-10 *et seq.* The evidence supporting this finding is contained in the Company's application. The Tega Cay community was developed in the early 1970's as a bedroom community near Charlotte, NC. After some years, the original developer went bankrupt. With the water and sewer provider at that time experiencing significant financial difficulties, Utilities, Inc. acquired those assets in 1991, established Tega Cay Water Service, Inc., and began providing water and sewer service to the residents of the community. The system serves the oldest part of the Tega Cay community situated on the shores of Lake Wylie in York County, South Carolina. The newer portions of the community are served by the City of Tega Cay. Tr. Vol. 2, pp. 622 – 623.

The Company's water distribution system includes an elevated storage tower, approximately 30 miles of water main, an estimated 20 miles of water service lines, 81 fire hydrants, valves, meters and appurtenances. The wastewater collection system contains approximately 50 miles of gravity sewer mains and force mains, an estimated 20 miles of service lines, 19 lift stations and appurtenances, and approximately 1,100 manholes. Tega Cay Water Service owns and operates two wastewater treatment plants, WWTP #2 and WWTP #3, which discharge treated wastewater into Lake Wylie. A third wastewater treatment plant, WWTP #4, is in standby mode (Tr. Vol. 2, p. 6233, ll. 2-11).

Since its test year ending December 31, 2008, Tega Cay invested approximately \$2.13 million in system improvements. (Tr. Vol. 2, pp. 256 – 257, l. 6). Tega Cay's capital improvements to its water distribution system since the end of 2008 include the replacement of capital assets that reached the end of their service life or that failed such as meters, valves, service lines, and sections of water main. Id. According to Tega Cay witness Patrick Flynn, much of the capital investment made to the wastewater system since the end of 2008 reflect wastewater projects that were constructed in order to meet regulatory requirements or to replace existing assets. Tr. Vol. 2, pp. 524-526. In January 2011, the utility completed the last of those improvements, and since that time, the utility has discharged effluent with a phosphorus concentration that is well below the permitted maximum amount. Id.

In February 2011, the utility entered into a Consent Order with DHEC in which the utility agreed to develop and execute a Corrective Action Plan designed to identify and address deficiencies in its wastewater collection system in order to eliminate sanitary sewer overflows (SSO's) from occurring. Id. The elements of the Corrective Action Plan were prioritized so that

those portions of the collection system that had a history of frequent SSO's were addressed first in order to reduce SSO activity as rapidly as possible by correcting those deficiencies that were the cause of the SSO's (Flynn Pre-filed Direct testimony pp. 523, l. 21 – 525 , l. 18).

The improvements made to the collection system since the end of 2010 resulted in a reduction in the frequency, duration, and volume of wastewater associated with SSO's. (Hearing Exhibit 18). There have been a total of nine SSO's since July 2011, but no wastewater entered any surface water bodies including Lake Wylie. Id. The total volume of the spills was less than 1,500 gallons (in six cases, less than 50 gallons) over the last 15 months. (Tr. Vol. 2, p 526). All SSO's were promptly reported to DHEC staff, the City of Tega Cay, and the Catawba Riverkeeper Foundation. Id. The system is now in full compliance with DHEC's rules and regulations. The utility has met the deadlines contained in the DHEC-approved Corrective Action Plan and will continue to carry out its operation, maintenance and repair activity going forward in order to further improve the day-to-day performance of the collection system. Id.

No large capital projects were completed in the water distribution system, the utility completed a number of operational activities recently, including the thorough inspection of each of the 81 hydrants in the system to verify that all were fully operable. (Tr. Vol. 2, p. 527, l. 1-16). All were found to be in proper operating condition. Id. Each hydrant was also flow tested to document the flow rate available at each location and then painted. Additionally, the utility carried out a periodic flushing program on dead ends of water lines in order to maintain adequate chlorine residual throughout the distribution system. Id. Because Tega Cay Water Service purchases potable water from York County, it has no treatment facilities of its own and thus has limited means of impacting water quality within its system. (Tr. Vol. 2, p. 526, l 13 -7, 15).

2. A fundamental principle of the ratemaking process is the establishment of a test year period. In Heater of Seabrook v. Public Service Commission of South Carolina, 324 S.C. 56, 478 S.E.2d 826 (1996), the Supreme Court observed that "[t]he 'test year' concept is very important in the rate-setting process. In order to determine what a utility's expenses and revenues are for purposes of determining the reasonableness of a rate, one must select a 'test year' for the measurement of the expenses and revenues." Id., 478 S.E.2d 828, n. 1. The test year is established to provide a basis for making the most accurate forecast of the utility's rate base, reserves, and expenses in the near future when the prescribed rates are in effect. Porter v. South Carolina Pub. Serv. Comm'n, 328 S.C. 222, 493 S.E.2d 92 (1997). The historical test year may be used as long as adjustments are made for any known and measurable out-of-period changes in expenses, revenues, and investments. Id. Accordingly, the Commission adopts the test year proposed by the Company and will make adjustments for any known and measurable changes outside the test year.

3. The appropriate test year for purposes of this proceeding is the twelve month period ending December 31, 2011. The evidence supporting this finding is contained in the Company's application and, the testimony of its witness Lubertozzi. (Tr. Vol. 2, p. 254, ll. 17-19). No other party objected to the proposed test year. The Commission will use rate of return on rate base as a guide in determining just and reasonable rates. The Commission has wide latitude in selecting an appropriate rate-setting methodology. Heater of Seabrook, *supra*, 478 S.E.2d at 830. Even though S.C. Code Ann. § 58-5-240(H) requires the Commission to specify an operating margin in all water and sewer cases, the Commission is not precluded by that statute from employing the return on rate base approach to ratemaking. Id. Operating margin "is less appropriate for utilities that have large rate bases and need to earn a rate of return sufficient to obtain the necessary debt and

equity capital that a large utility needs for sound operation." *Id.* In the Company's last rate case, we employed the return on rate base methodology. The Company's unadjusted rate base, according to its application, is \$3,571,121.

4. The Company requested rate of return treatment in its application and through its witness Steve Lubertozzi (Lubertozzi Pre-filed Direct testimony, p. 10, ll.17-21). No other party of record proposed an alternative method for determining just and reasonable rates and the testimony of ORS' witnesses Seale and Carlisle contemplate that return on rate base will be the methodology employed. Given the foregoing, and the uncontradicted testimony that the Company has a need to earn a fair and reasonable return on its investment, the Commission finds that the return on rate base methodology is the appropriate methodology to use in this case. The determination of return on rate base requires consideration of three components, namely: capital structure, cost of equity (or return on equity) and the cost of debt. Tr. Vol 2., pp. 317-319, l. 19.

5. In determining the Company's appropriate return on rate base, the correct capital structure and cost of debt is that of Tega Cay's parent, Utilities, Inc., at December 31, 2011. Accordingly, for purposes of this proceeding, the correct capital structure is 50.25% (debt) and 49.75% (common equity) and the correct embedded cost of debt is 6.60%. The evidence supporting this finding is contained in the testimonies of Company witness D'Ascendis. Tr. Vol. 2, pp. 317 – 318, l.17- l.3. Use of the cost of debt of Utilities, Inc. is appropriate as Tega Cay obtains all of its external financing from its parent, which determines how much income Tega Cay can retain. This approach is also consistent with the analysis we employed in the Company's last rate case, as well as every rate case that we have decided involving a jurisdictional utility that is a subsidiary of Utilities, Inc. since 2001.³

³ See Order No. 2006-582, Docket No. 2006-97-WS, October 9, 2006; Order No. 2010-557, Docket No.

6. A fair range of return on equity for Tega Cay is 10.80% - 11.30%. As requested by Tega Cay in its Application, the Commission will set rates based on a return of equity of 10.86%. The evidence supporting this finding is contained in the testimony of Company witness Ahern. As noted by witness Ahern, under the standards enunciated in Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944) and Bluefield Waterworks Improvement Co. v. Public Service Commission, 262 U.S. 679 (1922), a utility is entitled to an opportunity to earn a fair rate of return. Tr. Vol. 2, p. 355 ll. 1-21. Ms. Ahern testified that as a wholly-owned subsidiary of Utilities, Inc., Tega Cay's common stock is not publically traded and therefore a market-based common equity cost rate cannot be determined directly for Tega Cay. To arrive at her range of recommended common equity cost rate of 10.80% to 11.30%, Ms. Ahern assessed the market-based common equity cost rates of a proxy group for insight into a recommended common equity cost rate applicable to Tega Cay. Consistent with the Efficient Market Hypothesis, Ms. Ahern's recommendation results from the application of market-based cost of common equity models, the Discounted Cash Flow (DCF) approach, the Risk Premium Model (RPM), and the Capital Asset Pricing Model (CAPM) for a proxy group of nine water companies. In addition, Ms. Ahern selected a group of domestic non-price regulated companies comparable in total risk to the nine water companies applying the DCF, RPM, and CAPM to them as well as assessing projected returns on book common equity or partner's capital in accordance with the opportunity cost standards of Hope and Bluefield. Tr. Vol. 2, pp. 352-354 l. 16 - l. 25. After reviewing the cost rates based upon her models, she concluded a common equity cost rate of 10.70% is indicated before any adjustment for

business risk related to Tega Cay. Because Tega Cay's business risk is greater than that of the proxy group of nine water companies, Ms. Ahern opined that the equity cost rate based on the proxy group needed to be adjusted upward by 0.35% to reflect Tega Cay's greater business risk. After her adjustment, the business risk adjusted common equity cost rate is 11.05%. Based upon her risk adjusted common equity cost rate, Ms. Ahern's range of recommended common equity cost rate for Tega Cay is 10.80% - 11.30%. Tr. Vol. 2, p. 354, ll. 27-36). Ms. Ahern's results are as follows:

	Proxy Group of Nine Water <u>Companies</u>
Discounted Cash Flow Model	8.82%
Risk Premium Model	10.53%
Capital Asset Pricing Model	10.69%
Cost of Equity Models Applied to Comparable Risk, Non-Price Regulated Companies	<u>13.00%</u>
Indicated Common Equity Cost Rate Before Adjustment for Flotation Costs and Business Risks	10.70%
Business Risk Adjustment	<u>0.35%</u>
Indicated Common Equity Cost Rate	<u>11.05%</u>
Range of Recommended Common Equity Cost Rate	<u>10.80% - 11.30%</u>

Ms. Ahern testified that the theory underlying the DCF model was that the present value of an expected stream of net cash flows during the investment holding period can be determined by discounting these cash flows at the cost of capital. DCF theory indicates that an investor buys a

stock for an expected total return rate which is derived from cash flows received in the form of dividends plus appreciation of market price (the expected growth rate). Mathematically, the dividend yield on market price plus the growth rate equals the capitalization rate that is, the total common equity return rate expected by investors. Ms. Ahern uses a single stage constant growth DCF model because it is the most widely used version of the DCF used in public utility regulation. Tr. Vol. 2 at p. 373, ll. 3-19.

The median result of the application of Ms. Ahern's DCF model is 8.82% for the nine water companies. In arriving at her conclusion of a DCF-indicated common equity cost rate for the proxy group, Ms. Ahern relied on the median of the results of the DCF due to the wide range of DCF results as well as the continuing volatile capital market conditions in light of the continuing fragile economic recovery and to avoid giving undue weight to outliers on either the high or the low side. Ms. Ahern found the median to be a more accurate and reliable measure of all DCF results. Tr. Vol. 2 at p. 378, ll. 6-15.

The theoretical basis of the RPM used by Ms. Ahern is based on the basic financial principle of risk and return, namely that investors require greater returns for bearing greater risks. Ms. Ahern employed both the Risk Premium Model (RPM) using a total market approach and the Predictive Risk Premium Model (PRPMTM). The result of Ms. Ahern's application of the PRPMTM and the total market approach RPM is 10.53%. Tr. Vol. 2 at p. 384, ll. 17-21.

Also, Ms. Ahern employed the CAPM to assess cost of equity. Ms. Ahern explained that the CAPM theory defines risk as the co-variability of a security's returns with the market's returns as measured by beta. A beta less than 1.0 indicates lower variability while a beta greater than 1.0 indicates greater variability than the market. Ms. Ahern applied both the CAPM and the

Empirical CAPM (ECAPM) to the companies in her proxy group to determine her results. Ms. Ahern concluded that the result of the CAPM and ECAPM was 10.69%. Tr. Vol. 2 at p. 388, ll. 15-17.

Ms. Ahern also applied the DCF, RPM and CAPM to a group of non-price regulated companies comparable in total risk to the nine water companies. Doing so is consistent with opportunity cost standards of Hope and Bluefield noted previously. Ms. Ahern also assessed the projected returns on book common equity or partner's capital of the non-price regulated companies. Ms. Ahern concluded that the projected return on book equity, partner's capital or net worth of the comparable group is 14.75% and concluded a return of 11.24% for the results on the DCF, RPM and CAPM applied to the comparable group. Based on her results, Ms. Ahern concluded a cost of common equity of 13% for the non-price regulated companies in her comparable group. Tr. Vol. 2 at p. 384, l. 22 – p. 386, ll. 1-6.

Ms. Ahern determined that it was important to adjust the common equity cost rate of 10.70% based upon the nine water companies to reflect Tega Cay's greater risk due to its smaller size. Ms. Ahern made an upward adjustment of 0.35% to reflect Tega Cay's greater relative business risk due to its smaller size relative to her proxy group. A business risk adjustment of 0.35% when applied to the 10.70% indicated common equity cost rate based upon the nine water companies before adjustment results in a business risk adjusted common equity cost rate of 11.05%. It was based upon this risk adjusted common equity cost rate that Ms. Ahern determined a range of recommended equity cost rate of 10.80% to 11.30%. A range of common equity cost rates of 10.80% to 11.30% when applied to the common equity ratio of 49.75% results in a range of overall rate of returns of 8.69% - 8.9% which Ms. Ahern found to be reasonable. Tr. Vol. 2, at p.

395, l. 16 - l. 19).

Dr. Carlisle recommended that Tega Cay receive a return on equity within a range of 8.48% to 9.98%. Dr. Carlisle used the Discounted Cash Flow Model (DCF) and the Comparable Earnings Model (CEM). Tr. Vol. 3 at p. 863, ll. 13-17). Dr. Carlisle's DCF analysis produced a cost of equity return on equity of 8.48% Tr. Vol. 3. at p. 867, ll. 5-7. Dr. Carlisle's CEM analysis indicated an ROE of 9.98% Tr. Vol 3 at p. 870, ll. 10-11.

Dr. Carlisle's applications of the DCF and the CEM are both flawed. In his DCF application, Dr. Carlisle used various historical and projected measures of growth Tr. Vol. 3 at p. 865, ll. 10-13). Ms. Ahern testified that consistent with both the Efficient Market Hypothesis (EMH) and the academic literature, it is appropriate to rely exclusively upon security analysts' forecasts of growth in earnings per share (EPS) at p. 406, ll. 4 – p. 409, ll. 1). Using only security analysts' forecasts of growth in EPS results in a 10.76% DCF derived common equity cost rate based upon Dr. Carlisle's data Tr. Vol. 2 at p. 411, ll. 4-7.

In his CEM, Dr. Carlisle selected a group of companies from *Value Line Investment Survey* (*Value Line*) based "the common factor [of] similar risk as measured by the covariance of the companies with the overall market or a proxy for the market, a statistic known as "Beta" ("β") Tr. Vol. 3 at p. 869, ll. 2-3. Ms. Ahern testified that Dr. Carlisle's selection of his CEM group is flawed because it is not based upon measures of total risk as beta is a "measure of only systematic or market risk" Tr. Vol. 2 at p. 412, ll. 8). Because Dr. Carlisle selected his CEM group based upon the single measure of systematic risk, or beta (β), his CEM analysis is not a valid assessment of a common equity cost rate applicable to Tega Cay Tr. Vo. 2 at p. 413, ll. 4-6. A more appropriated CEM analysis is Ms. Ahern's application of the DCF to her group of non-price regulated

companies selected based upon criteria of comparable total risk, which resulted in a DCF derived common equity cost rate of 11.48% Tr. Vol. 2 at p. 413, ll. 6-15.

In addition, Dr. Carlisle failed to reflect Tega Cay's greater business risk relative to his comparable group of nine water companies due to its smaller size Tr. Vol. 2 at p. 413, ll. 19-20. As discussed above, Ms. Ahern determined that an appropriate reflection of Tega Cay's greater business risk is 0.35% which should be added to Dr. Carlisle's range of common equity cost rate of 8.48% to 9.98% and to the corrected range of Dr. Carlisle's range of common equity cost rate, 10.76% (corrected DCF) to 11.48% (corrected CEM)

The Company's Application and the testimony of Mr. D'Ascendis reflected an imbedded cost of debt of 6.60%. Dr. Carlisle testified that Tega Cay's cost of long-term debt was 6.58% as opposed to 6.60% Tr. Vol. 3 at p. 871, ll. 1-3. Dr. Carlisle argues that the Company's cost of debt should be reduced to 6.58% by excluding flotation costs. Id., However, Dr. Carlisle acknowledged that the ORS schedules in the Company's previous rate case, Docket No. 2009-473-WS, and the Commission's order in that case, reflected an imbedded cost of debt rate of 6.60% Tr. Vol. 3 at p. 938, l. 13 - p. 941, l. 18. Dr. Carlisle offers no factual basis for his averment that Tega Cay's cost of long-term debt is 6.58%. Based on the evidence of record, the ORS' previous acknowledgment that Tega Cay's cost of long-term debt is 6.60%, and the Commission's Order in the previous rate case, we find that the Applicant's cost of long-term debt is 6.60%.

Dr. Carlisle recommends that the Commission "weigh" Tega Cay's cost of long-term debt. Dr. Carlisle did not recommend that the Applicant's cost of debt be reduced from 6.60% as supported by the evidence to 6.00%, Dr. Carlisle cites anecdotal evidence of South Carolina

electric utilities obtaining short-term financing at interest rates lower than 6.60% Tr. Vol. 3, at pp. 870, l. 4 - 871, l. 29.

During cross examination, Dr Carlisle testified that he relied on the Company's application when determining that its cost of debt should be 6.58%. However, Dr. Carlisle is mistaken. The Company's Application expressly sets out that the cost of debt is 6.60% (Application, Schedule B, Page 4 of 4 at Footnote [j]). Company Witness Lubertozzi testifies the Company's cost of debt is 6.60% Tr. Vol. 2 at p. 255, ll. 16-17. Additionally, Company Witness D'Ascendis' Direct Testimony clearly states the Company's embedded cost of debt is 6.60% Tr. Vol. 2 at p. 317, l. 17 – l. 3. Importantly, ORS witness Seale's direct testimony indicates that the Company's Application per Books embedded cost of debt is 6.60% Hearing Exhibit 22 at CLS-8. Moreover, Dr. Carlisle was in error when he suggested that the surrebuttal testimony of Ms. Ahern supported his position. Ms. Ahern's testimony, found in Vol. 2 at pp. 417 and 418 of the transcript are hypothetical calculations presented to the Commission to demonstrate the prejudicial use by Dr. Carlisle of 6.58% cost of long term debt. In fact, Ms. Ahern adopts a 6.60% cost of long term debt Tr. Vol. 2 at pp. 351, l. 19 – p. 352, l. 9.

The Commission does not find Dr. Carlisle's suggestion to be feasible. While Dr. Carlisle testified that SCE&G and Duke Energy have floated debt recently at a rate lower than Tega Cay's actual cost of debt, Dr. Carlisle's testimony is devoid of any analysis as to the applicability or the relevance of these loans. The evidence of record reflects that both SCE&G and Duke Energy are large electric utilities which enjoy higher authorized returns on equity than Tega Cay. Dr. Carlisle has failed to demonstrate that the financial circumstances of SCE&G and Duke compare favorably to Tega Cay. Dr. Carlisle recommends the case of Arizona American Water Company,

a water utility with a lower weighted cost of debt. However, on cross examination, Dr. Carlisle acknowledged that Arizona American Water Company was authorized a return on equity of 10.6%, considerably higher than that which Dr. Carlisle recommended in this case.

Moreover, Dr. Carlisle did not consider the feasibility of refinancing on his suggestion. In 2006, Tega Cay's parent, Utilities, Inc., entered into a long-term note – its only long term debt. The original principal amount of the 2006 note was \$180 million. For Utilities, Inc. to refinance its 2006 note, Utilities, Inc. would have to pay not only the \$180 million indebtedness but also the present value of all future payments. The make whole payment would cost Utilities, Inc. \$83.1 million as of February 2012. In order to repay the note, Utilities, Inc. would have to raise approximately \$260 million in capital to replace the \$180 million note not including the additional closing costs associated with the new issue. If the \$260 million were raised entirely by debt, it would increase Utilities, Inc.'s 50.75% debt ratio to 59.33%. The resulting increased financial risk would degrade Utilities, Inc.'s credit quality which means that Utilities, Inc. would not be able to enjoy the lower interest rates as suggested by Dr. Carlisle. The higher interest cost would be passed on to Tega Cay's ratepayers raising their rates Tr. Vol. 2 at pp. 308, l. 15 – p. 309, l. 17.

Dr. Carlisle admitted that he could not conclude that Tega Cay or its parent, Utilities, Inc., had been imprudent with respect to its long-term debt Tr. Vol. 3 at pp. 894, ll. 4-7 – p. 895, ll. 5-12). Nevertheless, Dr. Carlisle's recommended that the Commission "weigh" Tega Cay's cost of long-term debt (Carlisle Pre-filed Direct Testimony at page 13, ll. 19-25). Dr. Carlisle's recommendation would necessarily require the Commission to question the Company's decision to incur long term debt in 2006 with the benefit of hindsight. Even Dr. Carlisle acknowledged in his testimony that the Federal Reserve's lending policies had kept interest rates at abnormal rates

since 2009 in order to mitigate the effects of the recent economic recession Tr. Vol. 3 at p. 862, ll. 11-22; Hearing Exhibit 27, Surrebuttal Exhibit DHC-3 It would be arbitrary of the Commission to second guess the Company's decision to incur long-term debt in 2006 in light of these circumstances. Rate making is prospective and the Commission will not engage in any retroactive rate making at this point. The Commission finds that Tega Cay's cost of long-term debt is 6.60%. In addition, the Commission finds that a return on equity in this docket of 10.86% is fair, just, and reasonable.

7. Using the capital structure of Utilities, Inc. consisting of 50.25% debt and 49.75% common equity, a cost of debt of 6.60%, and a cost of equity of 10.86%, we conclude that an appropriate overall rate of return on rate base of 8.75% is appropriate and should be authorized for Tega Cay. The evidence supporting this conclusion is found in the testimony of witnesses D'Ascendis and Ahern as set out *Supra*. The following table indicates the capital structure of the Company, the cost of debt, the cost of equity as approved in this Order, and the resulting rate of return on rate base:

TABLE A

	RATIO	EMBEDDED COST	OVERALL COST
Long Term Debt	50.25%	6.60%	3.32%
Common Equity	49.75%	10.86%	5.43%
Total	<u>100.00%</u>		<u>8.75%</u>

After adjusting for rounding, the return on rate base is 8.75%.

8. In its Application, Tega Cay is seeking an increase in its rates and charges for water and sewer service which results in \$668,394, exclusive of bad debt expense, of additional revenues to Tega Cay, net of uncollectible accounts. However, based on the Company's rebuttal testimony, and its acceptance of various accounting adjustments proposed by the ORS, the proposed increase is effectively \$ 470,783, exclusive of bad debt expense

The evidence for the finding concerning the amount of the requested rate increase after agreed upon adjustments is contained in the Application filed by Tega Cay and in the testimony and exhibits of ORS witness Seale. The record reflects that this amount was calculated utilizing the billing units including customer growth included in the Company's Application [Exhibit B, Schedule B]. However, the rebuttal testimony of Tega Cay indicates that it is seeking additional revenues of \$4,811 more than booked revenue from water operations and additional revenues of \$465,792 more than booked revenue from sewer operations, exclusive of bad debt expense. Hearing Exhibit 15, (KEM 1, Schedule B).

The Commission notes that based on Tega Cay's rebuttal testimony, its acceptance of various accounting adjustments proposed by the ORS and applying the recommended range for return on equity of Dr. Carlisle, the proposed increase would range from a high of \$394,150 to a low of \$343,350. Using the midpoint of Dr. Carlisle's range, the proposed increase would be \$368,750.

9. The appropriate operating revenues for Tega Cay for the test year under present rates and after accounting and pro forma adjustments are \$1,244,846. The evidence supporting this finding is the rebuttal testimony of Kirsten E. Markwell, to wit, KEM 1, Schedule B. and in her Exhibit No. 16, which summarized the Company's differences with the ORS.

10. The appropriate operating expenses for Tega Cay for the test year under present rates and after accounting and pro forma adjustments and adjustments for known and measurable out-of test-year occurrences are \$1,133,649. The evidence supporting this finding is the rebuttal testimony of Markwell, to wit, hearing Exhibit 15 KEM 1, Schedule B, and in her Exhibit No. 16

11. Following its audit of the Company's books, the ORS proposed forty-five adjustments to the The ORS's proposed adjustments are summarized in ORS accountant Christina Seale's prefiled Direct Testimony and her Audit Exhibit No. CLS-4. Tr. Vol. 3, p. 740. The Company agreed to many of the ORS's proposed adjustments. Specifically, Ms. Markwell testified that the Company agrees with ORS adjustments 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 20, 21, 22, 23, 24, 26, 29, 34, 37, 38, with adjustments 27, 28, 30, 31, 32, 36, 40, 41, 42, 43, 44 and 45 being resulting fall out items. Tr. Vol 2, p. 478, l. 11-15.

Following, are the Commission's findings regarding specific adjustments on which the parties differed:

A. ORS Adjustment 1 - Service Revenues. The Company and ORS were virtually in agreement as to service revenues. (The Company and ORS were \$1.00 apart due to rounding). Tr. Vol. 2, p. 465, l.15-21. The Commission adopts the Company's proposed service revenues.

B. ORS Adjustment 4 - Salaries and Wages - Maintenance. The Company and ORS were in agreement with respect to salaries and wages and maintenance (The Company and ORS were \$1.00 apart due to rounding). Tr. Vol. 2, p. 465, l. 21-22. The Commission adopts the Company's proposed salaries and wages.

C. ORS Adjustment 5 - Purchased Water. The Company proposes to zero

out a purchase water balance in the amount of \$2,508.00. The ORS treats this purchased water balance as an “overcollection”. Tr. Vol. 3, p. 789, l. 24 - 790, l. 18. As explained by Ms. Markwell, Tega Cay is a water distribution system and has a purchased water pass-through. Tr. Vol. 2, pp. 465, l. – 468, l. 9. This means that for every dollar charged by the purchased water provider, a dollar in cost is passed through to the ratepayer without mark-up by the Company. Id.

Due to timing differences, it is not uncommon, such as is the case in this docket, for a minor amount of money to remain in the purchased water account at year end. In other words, the amount that Tega Cay collected in January of 2011 for the previous month’s billings was greater than the amount booked for December of 2011, which would not be collected until January of 2012 (Tega Cay accounts for its purchased water using the accrual method of accounting which requires the Company to account for revenue when billed and expenses when an invoice is received or known). Id. Therefore, a balance of \$2,508.00 remained in the account at the end of the test year. Id. This money should not be refunded to Tega Cay’s customers because it simply reflects the difference in purchased water billings between the first and last months of the test year. For purposes of the application, Tega Cay proposed to “zero out” the balance to reflect the purchased water pass-through provision, thereby reflecting the pass-through nature of this expense. See Tr. Vol. 2, pp. 465, l. 24 – 468, l. 10; pp. 478, l. 21- 479, l. 13.

Instead, The ORS proposed to leave \$2,508.00 in operation and maintenance expenses, claiming that these funds were “overcollected” and should be returned to Tega Cay’s customers. Tr. Vol. 3, p. 789, l. 24 - 790, l. 18. However, ORS witness Morgan, who testified regarding the ORS’s proposed adjustment, acknowledged that he had not considered either the Company’s collections in 2011 which were derived from the prior year’s billings or the Company’s billings for

December 2011, which were not collected during the test year. Tr. Vol. 3, p. 818, l. 16-22. Nor did Mr. Morgan consider the Company's use of the accrual method of accounting in making the determination that the Company had over collected \$2,508. Tr. Vol. 3, pp. 814, l. 24 - 815, l. 18. Mr. Morgan merely looked at the account's balance at the end of the test year, and concluded that an overcollection took place. The Commission finds that Tega Cay did not over collect revenue for purchased water, and that the Company was correct to "zero out" the balance in this account under these circumstances.

D. ORS Adjustments 9 - Maintenance and Repair. Tega Cay's pro forma maintenance expenses are \$36,026. lower than that of the ORS. Tr. Vol. 2, p. 468, l. 11-22. ORS witness Morgan testified that after his review of invoices related to capital projects, and the descriptions of the work and service location identified on each invoice, Tega Cay incorrectly classified expenditures totaling \$177,705 as capitalized projects when they were instead routine work associated with operations and maintenance. Tr. Vol. 3, p. 809, ll. 4-17. As a result, ORS reclassified those expenses from capitalized projects to operating and maintenance expenses. Id. However, as explained by Mr. Flynn, Tega Cay capitalizes expenditures which result in the utility replacing an existing capital asset, installation or construction of a new asset, or extending the service life of an existing asset. Mr. Flynn explained that Tega Cay had a system in place for categorizing expenses, and that some of the invoices reviewed by Mr. Morgan were prepared by third-parties who do not always accurately describe the nature of the work performed. Tr. Vol. 2 pp. 537 – 541. The expenditures of \$177,705, which the ORS would treat as routine maintenance expenses, were properly classified as capital expenditures. Tr. Vol. 2, pp. 536, l. 20 – 540, l. 25. The Commission is satisfied that these expenditures were properly capitalized as

proposed by the Company in its application.

E. ORS Adjustment 18 - Regulatory Commission Expense. The Company and ORS differed as to rate case expense as of the hearing in this matter. Upon motion of counsel for Tega Cay, the Commission granted the Company the right to submit documentation justifying additional rate case expense through the date of the hearing and requested that the ORS audit these rate case expenses, which the ORS agreed to do. The Company has now submitted an updated rate case expense exhibit showing \$_____in total rate case expenses (including \$37,794 in unamortized rate case expenses incurred in the Company's last case) which have been audited by the ORS. Moreover, the Company proposed to amortize the rate case expenses over a three year period, a schedule which the ORS agrees with. Rate case expenses of \$_____are reasonable and a three year amortization period is likewise reasonable.⁴

F. ORS Adjustment 19 - Pension and Other Benefits. Tega Cay's pro forma general pension and other benefit expense is \$10,060 higher than that of the ORS. Hearing Exhibit 16, p. 3. The difference arises ORS allowed the Company's 401(K) matching plan contributions, but disallowed the 401(K) Performance Incentive Plan contributions. Tr. Vol. 3, p. 752, l. 1-6. The Performance Incentive Plan introduced by the Company in 2010, allows for employees to be rewarded through their retirement plan for the Utilities' Inc.'s overall performance at the end of the year. Tr. Vol. 2, pp. 470, l. 4 – 472, l. 22. The performance plan is discretionary, but is awarded to all employees, regardless of whether they contribute to a 401(K). Id. The contribution to the Performance Incentive Plan is not an individually based contribution, but rather is a company-wide contribution given to all employees. Id. 2010 and 2011

⁴ The parties intend to submit updated expenses after the ORS has concluded its review of the Company's updated rate case expenses.

contributions by Utilities, Inc. to its employees were 4%. Id. Prior to implementing the Performance Incentive Plan, Utilities, Inc. contributed 4% to its employees' pension funds regardless of the Company's performance. Tr. Vol. 2, pp. 497 – 498. The Company sees the Performance Incentive Plan as a way to incentivize its employees to work safely and profitably. Id. Ms. Markwell, testified that based on the Company's history of making 4% contributions through the Performance Incentive Plan she predicted another 4% contribution would be awarded at the end of 2012. Tr. Vol. 2, p. 498, l. 18-22. Ms. Markwell explained that the decision on whether to make performance based contributions was based on the company's performance during the calendar year, and was typically made by the Company's compensation committee early in the following year. Tr. Vol. 2, pp. 470-471. Therefore, the Company's claimed expenses for benefits during the 2011 test year, included the four percent award based on the Company's performance during the 2010 calendar year. Id.

The ORS objected to allowing the performance based contribution as an expense, claiming that it is not known and measurable. The ORS's witness, Seale, testified that there was no way to be sure that the four percent contribution would be made in 2012 and subsequent years, and therefore it was not known and measurable. Tr. Vol. 3, p. 787, l. 15-20. Therefore the ORS recommended an adjustment removing it from the Company's allowable expenses.

Based on the ORS's reasoning, it is difficult to see how performance based contributions could ever be allowed, because by its very nature it will be forward looking and involve some degree of uncertainty. As a matter of policy, the Commission believes that regulated utilities should not be discouraged from linking their employees' compensation to performance. In this case, the Company has shown that it has consistently paid the 4% contribution over several years,

including the test year. The Commission finds that, in this case, the Company's performance based contributions are sufficiently known and measurable to be allowable. Because these costs are known and measurable and paid in the test year, the performance-based 401(K) contributions are reasonable and should appropriately be included as a part of Tega Cay's pension and other benefit expenses. Based on the Company's calculation, it is appropriate to include total pension and other benefits expense of \$60,130.00 with \$30,252.00 attributable to water, and \$29,878.00 attributable to sewer. Of that amount, \$17,614.00 is related to the 401(K) expense of 7% in salaries. Tr. Vol. 2, pp. 481, l. 13 – 482, l. 11.

G. ORS Adjustment 23 – Leak Mitigation Fund. The Company proposes to establish a "Leak Mitigation Fund" which would fund bill reductions for customers who experience a water leak on their property. Tr. Vol. 2, pp. 545, l. 13 – 546, l. 20. Presently, the Company is unable to forgive a customer's bill without adversely impacting its earnings. Id. Initially, the Company proposed to include \$28,000 in revenues in the fund, but lowered that amount to \$10,000 through the rebuttal testimony of witness Flynn. Tega Cay Application, Schedule B. Company witness Flynn explained that establishing this fund would give the Company the wherewithal to deal with these situations, while minimally impacting the customer's bill (he estimated the effect of the charge to be \$0.10 per month). Tr. Vol. 2, pp 533-535, 545, l. 23 – 546, l. 3. The ORS opposed the establishment of the fund on the grounds that the amount required for such a program is not known and measurable. Tr. Vol. 3, pp. 807, l. 4 – 808, l. 7. In his rebuttal testimony, Mr. Flynn proposed to reduce the amount of the fund to \$10,000 and suggested conditions for administering the fund for the Commission's consideration. Tr. Vol. 2, pp. 545, l. 13 – 546, l. 20. The ORS continues to oppose establishment of the fund.

The Commission believes that the Leak Mitigation Fund serves a valid purpose. When a leak occurs on a customers' property, it is not the Company's responsibility, and the customer is obligated to pay the bill for lost water. The customer, who is often unaware of the leak until he receives his monthly bill, is often placed in financial hardships. Misunderstandings also abound about who bears responsibility for the bill. Customers sometimes bring these matters before the Commission, where they are unable to obtain relief after all parties have incurred the expense and inconvenience of litigating the dispute. See e.g. Davis v. Southland Utilities, Docket No. 2011-506-W, Order No. 2012-567. Therefore, the Commission welcomes the Company's effort to find a solution.

However, the Commission shares the ORS's concern that the cost of such a fund is not known and measurable. As proposed by the Company, unused revenues from the fund could be applied towards the Company's operating expenses. Instead, the Commission believes that the Leak Mitigation Fund should be established as a dedicated account, capped at \$10,000. When the fund's balance reaches \$10,000, or a lower amount if deemed appropriate, no fees would be collected for the Leak Mitigation Fund. Furthermore, funding for the program would be identified as a separate line item on each customer's bill. Requests for relief from the fund would be limited to one time during a five year period for a specific premise. Relief would only be available for water bills, not sewer charges. The maximum amount of relief applied to a specific customer's bill would be the lower of the difference between the abnormally "high" bill and the applicant's annual average bill, or \$250. Fund activity would be reported on annual basis to the Commission and the ORS in a format to be established by the Commission.

Because, the detailed implementation of such a program is beyond the scope of these

proceedings, the Commission requests that the Company and the ORS seek to reach consensus on a Leak Mitigation Program which incorporates the above described conditions, and such other safeguards and procedures as may be necessary. The Commission also requests that the Company and the ORS submit a recommendation on how such a program could be established within six (6) months of the date of this Order.

H. ORS Adjustment 25 - Depreciation Expense. The Company and ORS have an inconsequential difference of \$53 for depreciation expense. Tega Cay's adjustment includes depreciation expense on all plant and service plus pro forma plant and reflects the appropriate amount for rate making purposes. The Commission finds that the Company's total for depreciation expenses is supported by Ms. Markwell's testimony.

I. ORS Adjustment 26 - Amortization Expense of CIAC. The Company and the utility do not differ with respect to the amortization expense of contributions in aid of construction (The Company and ORS were \$1.00 apart due to rounding). The Commission adopts the Company's total for this item.

J. ORS Adjustment 27 - Payroll Taxes. The Company and ORS have no substantive disagreement with respect to payroll taxes. The Company and ORS were \$1.00 apart due to rounding. The Commission adopts the Company's total for this item.

K. ORS Adjustment 33 – Plant in Service - Vehicles. Tega Cay proposes to adjust its vehicle balance to \$114,870 in Utility Plant in Service, while the ORS proposes a vehicle balance of \$ \$107,013. Ms. Markwell testified to the method the Company used to arrive at its requested inclusion of \$114,870 in rate base. Tr. Vol. 2 p. 486, l. 1 - p. 487, l. 2. Both the ORS and Tega Cay propose to depreciate vehicles over six (6) years. Ms. Markwell explained that if an

operator's salary allocation to Tega Cay is 40%, that operator's vehicle is allocated at 40% as well. Id. Based on this methodology, Tega Cay allocates \$114,870 in vehicles of which \$47,935 is allocated to water and \$66,935 is allocated to sewer. Id. Ms. Seale disallowed \$7,857 of the Company's proposed vehicle asset cost, testifying that it was the cost associated with a vehicle that did not appear on the company's fleet list. Tr. Vol. 3, p. 753, l. 13 – 754, l. 1. However, Ms. Seale did not identify the disallowed vehicle in her prefiled testimony, nor could she do so at the hearing. Tr. Vol. 3, p. 764, l. 12-22. The Commission finds Ms. Markwell's testimony persuasive and that Tega Cay has properly accounted for vehicles and the depreciation of these vehicles.

L. ORS Adjustment 33 – Plant in Service - Expensed Capital. As discussed supra in regarding the ORS's proposed Adjustment 9, the ORS reduced utility plant in service for certain items that Tega Cay capitalized which the ORS believed should have expensed in 2010, 2011 and 2012. This proposed adjustment simply reflects the corresponding reduction of \$177,705 plant in service which results from the ORS's proposal to increase the Company's maintenance expenses. Hearing Exhibit 16. The Commission has already addressed this issue in Connection with proposed Adjustment 9 and finds that the Company's proposal to capitalize these expenditures is appropriate.

M. ORS Adjustment 33 – Pro Forma Project. Tega Cay proposes to include two (2) invoices totaling \$74,986 in rate base to which the ORS objects. Hearing Exhibit 16. First, the ORS excludes \$47,261 related to invoices from W.K. Dickson for engineering costs incurred in devising a Corrective Action Plan pursuant to a Consent Order entered into between the Company and DHEC. Tr. Vol. 3, p. 788, l. 7-12. Second, the ORS excludes an invoice from

TNT, Inc. for \$27,725. Tr. Vol. 3, pp. 810, l. 19 – 811, l. 6.

ORS and Tega Cay disagree on the treatment of the engineering costs associated with compiling information required to formulate the Corrective Action Plan which resulted in the collection system upgrades in Tega Cay. ORS witness Morgan testified that the costs of compiling the information required by the Corrective Action Plan were in the nature of a penalty and therefore should be excluded this amount from recovery. Tr. Vol. 3, p. 811, ll. 15-19. However, as explained by Mr. Flynn, the engineering services necessary to design the Corrective Action Plan were an integral component of Tega Cay's efforts to construct the improvements required by the DHEC-approved Corrective Action Plan. Tr. Vol. 2, 551, p. 8, ll. 4-17. Tega Cay paid a monetary penalty of \$60,000 to DHEC which would not be allowable, and was not claimed as an expense by the Company, and properly excluded. Tr. Vol. 3, p. 826; Exhibit 24. However, the Commission finds that the Company's Corrective Action Plan is not a penalty; instead it constitutes a comprehensive plan designed to systematically address collection system deficiencies and make necessary upgrades to the system in order for the Company to comply with DHEC regulations. Tr. Vol. 2, p. 557. We reject the apparent assertion by Mr. Morgan that the cost of engineering services cannot be included in capital expenditures recognized for ratemaking purposes simply because it is an outfall of a DHEC enforcement action. Indeed, compliance with environmental regulation is normally a component of increased capital expenditures for any jurisdictional utility. We perceive no difference from a ratemaking standpoint in a capital expenditure that arises out of a regulatory enforcement matter or out of compliance with environmental statutes, regulations, or other orders of competent environmental regulatory authorities. In short, where a capital expenditure is necessary to ensure environmental

compliance, and the expenditure itself is not otherwise subject to challenge, it is allowable for inclusion in a utility's rate base as part of plant which is used and useful in providing service -- regardless of the impetus for it. The Commission finds that these engineering costs associated with designing the Corrective Action Plan and the sewer upgrades are recoverable in this application.

The ORS also excluded capital expenditures arising from an invoice for TNT, Inc. in the amount of \$27,725. Mr. Morgan testified the invoice did not identify the specific location or type of service provided by the vendor, and that the ORS was therefore unable to determine whether the expense was used and useful to provide service to Tega Cay customers (Morgan Pre-filed Direct testimony at p. 796, l. 19 - p. 6, l. 3). Instead, Mr. Flynn testified that TNT, Inc. was hired by Tega Cay to replace over 300 linear feet of 6 inch gravity sewer pipe, and that TNT, Inc.'s services were necessary, prudent, and appropriate for the project and as a result Tega Cay should be allowed recovery for this cost Tr. Vol. 2, p. 551, ll. 4-17. An examination of the invoice found on page 361 of Exhibit 25 reflects that the work performed by TNT, Inc. was for "JOB: Tega Cay – New Main, Tega Cay SC" and described the project as "100% complete". While the invoice was addressed to "Carolina Water Service" this was obviously a typographical error. While he cited several hypothetical concerns that could be associated with a similar invoice, Mr. Morgan did not offer any specific ground for disallowing this expenditure. The Commission finds that the amount of this invoice from TNT, Inc. should be allowed.

N. ORS Adjustment 33 – Computers. Without explanation, the ORS also proposes to exclude \$13,169 in computer costs. Tr. Vol. 3, p. 745, l. 6-14. The company's expenditures for computers are presumptively used and useful and must be allowed in the absence

of testimony to the contrary. The Commission finds that the disputed amount should be included in the Company's rate base.

12. Depreciation. Accumulated depreciation has been calculated on the gross plant in service, less land and organization. The accumulated depreciation calculation provides adjustments for missing invoices, Commission ordered adjustments, the pro forma plant retirement, and the correct depreciable balance for vehicles and computers. The ORS did not provide a calculation for accumulated depreciation.

13. Return on Rate Base. The following table indicates the Company's gross revenues for the test year after adjustments approved herein, under the presently approved rate schedules; the Company's operating expenses for the test year after accounting and pro forma adjustments and adjustments for known and measurable out-of-test year occurrences approved herein; and the rate of return on rate base under the presently approved schedules for the test year:

TABLE B

	Before Increase
Operating Revenues	\$1,244,846
Operating Expenses	1,133,649
Net Operating Income	\$ 111,197
ADD: Allowance for Funds Used During Construction Customer Growth	0
TOTAL INCOME FOR RETURN	\$ 111,197
Return on Rate Base	2.45%

14. The appropriate rate base for Tega Cay for the test year after accounting and pro forma adjustments and adjustments for known and measurable occurrences outside the test year is \$4,546,936. The evidence supporting this finding is contained in KEM 1, Schedule C.

15. The net operating income requirement for Tega Cay, using the return on rate base of 8.75% found appropriate in this Order and the adjusted rate base of \$4,546,936, is \$397,783.

16. Under rate of return on rate base regulation, the Commission must approve an income requirement that will permit the Company to recover its operating costs and provide it an opportunity to earn the approved rate of return on rate base. The determination of the income requirement requires a calculation using approved Operating Revenues and approved Operating Expenses to determine Net Operating Income for Return. The following table illustrates the calculations of Tega Cay's Total Income for Return:

TABLE C

	<u>After Increase</u>
Operating Revenues	\$1,713,350
Operating Expenses	<u>1,315,568</u>
TOTAL INCOME FOR RETURN	\$ 397,783
Return on Rate Base	<u>8.75%</u>

As demonstrated on Table C, Total Income for Return after the increase approved herein is \$397,783.

17. In order for Tega Cay to have the opportunity to earn its income requirement of \$397,783, Tega Cay must be allowed additional revenues totaling \$470,783 reflecting actual revenues without bad debt expense.

18. In order for the Company to have the opportunity to earn the 8.75% rate of return on rate base approved herein, the Commission must increase revenues sufficient to achieve a Total Income for Return of \$397,783, as calculated in Finding of Fact No. 12. The additional revenue calculated for the Company to have the opportunity to earn its approved rate of return of 8.75% requires an increase in annual revenues of \$470,783.

19. The resultant operating margin for Tega Cay, based upon the adjustments and rates approved herein, is 14.41%. S.C. Code Ann. Section 58-5-240(H) provides, in part, that "[t]he [C]ommission shall specify an allowable operating margin in all water and wastewater orders." Based upon the rate of return on rate base approved herein and the revenues and expenses also approved herein, the corresponding operating margin is calculated to be 14.34%. The following Table reflects an operating margin of 14.34%:

TABLE D

Operating Revenues	\$1,713,350
Operating Expenses	1,315,568
Total Income for Return	397,783
Operating Margin	14.41%

(After Interest Expense of \$150,884)

20. Fire Hydrant Charge. The Company seeks to increase its yearly charge for water

service for a fire hydrant from \$117.23 per year to \$135.48 per year. The ORS does not appear to object to this request. The request is reasonable and the Commission finds the charge of \$135.48 per year to be appropriate and in the public interest and is approved.

21. Performance Bond. It is in the public interest to require a performance bond in the amount of \$700,000 for the Company. Tega Cay currently has a bond of \$350,000 for water operations and \$350,000 for sewer operations. The Commission's regulations state bond amounts must range from an amount not less than \$100,000 and not more than \$350,000. See S.C. Code Ann. Section 58-5-720. Tega Cay does not object to bonds of \$350,00 each for water and wastewater operations.

22. Customer Service. Karen Sasic, Director of Billing and Regulatory Relations for Utilities, Inc. with oversight responsibility for Customer Service for Tega Cay testified that 99.1% of all bills were issued on time during the test year. The less than 1% of bills that were delayed were the result of issues such as block access to the meter, fogged meter glass and water in the meter boxes. There has been no financial impact to the customers as a result. Tega Cay has improved the timeliness of its billing since the test year Tr. Vol. 2 p. 589, l. 20 – p. 590, l. 17. Tega Cay water customers are served by bulk water purchased from York County. Because Tega Cay does not have to wait for the York County bulk invoice in order to calculate its customers' bills each month, Tega Cay's bills are timely. Tega Cay pays for the bulk water from York County based upon the aggregate of all customers' usage as registered on their water meters each month Tr. Vol. 2, p. 591, l. 11 – p.592, l. 2. Ms. Sasic also testified that Tega Cay's field personnel completed 97% of their field activities on time during the test year. Through the third quarter of 2012, Tega Cay's billing personnel have continued to improve upon this metric and

have completed 98% of field activities on time Tr. Vol. 2, p. 593, l. 22 – p. 594, l. 6. In response to the suggestion of ORS witness Morgan concerning collection of delinquent accounts, Ms. Sasic testified that as early as January 2011, Tega Cay's collection specialist began making telephone calls in an attempt to reach customers with the highest debt before the customer accounts are sent to a collection agency written off to bad debt. In addition, Tega Cay has contacted its delinquent customers by automatic dialer since March 2012 to encourage payment of delinquent accounts. The automatic dialer is programmed to play a pre-recorded message giving the customers an option to speak to a customer service representative immediately or to telephone back at a later time to discuss their account Tr. Vol. 2 at pp. 597, l. 14 – p. 598, l. 5).

Nonetheless, the public witnesses testified to certain service complaints at the December 3, 2012, and January 8, 2013, public hearings. The principal complaint surrounded service overflows and sewage spills which affected the property of Tega Cay ratepayers and the waters of Lake Wylie. Ms. Stevenson and Mr. Kunzman in particular testified to these spills. However, it is clear from this docket that Tega Cay has expended considerable sums for the repair and replacement of pumping station and its wastewater facilities. The improvements made to the collection system since the end of 2010 generated a drastic reduction in the frequency, duration, and volume of wastewater associated with sanitary sewer overflows. There have been a total of nine sanitary sewer overflows since July 2011. The total volume of the spills was modest and in no instance did wastewater enter surface water bodies including Lake Wylie. Tega Cay's staff responded properly in each instance to contain and clean these spills and all such spills were promptly reported to DHEC's staff, the City of Tega Cay, and the Catawba Riverkeeper Foundation. Tega Cay's system is now in full compliance with DHEC rules and regulations Tr.

Vol. 2 at p. 626, ll. 12-21. In addition, it is clear from the responsive testimony of Ms. Sasic, Mr. Flynn, and Mr. Mitchell that the Applicant has worked to maintain its facilities and has responded timely to customer concerns and complaints about its facilities.

The public testimony does not otherwise raise questions of systematic service weakness. There were isolated complaints from public witnesses concerning water quality, yet Tega Cay buys all of its water from York County and York County has demonstrated a history of compliance with all health requirements. The record reflects one instance in which the lead content of its water exceeded the limits set by DHEC. However, retesting the lead levels as required by DHEC found Tega Cay's water to be within acceptable limits. Otherwise, customer service complaints were isolated. In every case, the Company responded promptly and honestly to its customers' concerns and the Commission finds that the customer service complaints raised by the public witnesses did not arise to the level requiring remedial action by this Commission. In light of this evidence, the Commission finds that Tega Cay's customer service is adequate in all respects.

The Commission sympathizes with the frustration of these customers. However, the denial of rate relief due to the problems based upon individual customer complaints without reference to the Company's service as a whole and documented increases in both operational and maintenance expenses and increases in rate base would directly contradict the Supreme Court's holding in Utilities Services of South Carolina, Inc. v. South Carolina Office of Regulatory Staff, 392 S.C. 96, 112, 708 S.E.2d 755, 764 (2011). In Utilities Services, the Supreme Court clearly held that evidence that a particular expenditure by a utility might be imprudent cannot form the basis for finding that all expenditures were imprudent. In other words, the Commission's decision with respect to expenses and rate base may take into account perceived deficiencies that

call into question the reasonableness of the Company's expenditures specific to such deficiencies. That decision, however, must also determine "whether even excluding any expenses [that are found] imprudent, [the] Utility's expenses have increased since its last application such that it might be entitled to an increase in rates" Utilities Services, *supra*..

V. CONCLUSIONS OF LAW

Based upon the Findings of Fact as contained herein and the record of the instant proceeding, the Commission makes the following Conclusions of Law:

1. Rate of return on rate base is the appropriate guide for the Commission to use in determining the lawfulness of the rates of Tega Cay and in fixing of just and reasonable rates for Tega Cay to charge its customers in South Carolina.

2. A fair rate of return on rate base for the operation of Tega Cay in South Carolina is 8.75%. This rate of return is calculated using a capital structure of 50.25% debt and 49.75% equity, a cost of debt of 6.60%, and a return on equity of 10.86%. Based on the discussion and analysis of the Commission as detailed in this Order, these components of capital structure, cost of debt, and cost of equity and the resulting rate of return on rate base produce a fair and reasonable rate of return which the Company should have the opportunity to earn.

The Commission's analyses which give rise to the Conclusions of Law are contained in the discussions of Section III of this Order.

3. For the test year of September 30, 2010, the appropriate operating revenues, under present rates and as adjusted in this Order, are \$1,244,846, and the appropriate operating expenses, under present rates and as adjusted in this Order, are \$1,133,649.

4. Using the rate base as adjusted in this Order of \$4,546,936 and the return on rate

base of 8.75% found to be fair and reasonable in this Order, the income requirement for Tega Cay is \$397,783.

5. In order for Tega Cay to have an opportunity to earn the return on rate base found reasonable and approved in this Order and to meet the income requirement, Tega Cay must be allowed additional revenues of \$470,783.

6. The rates approved in this Order are designed to be just and reasonable without undue discrimination and are also designed to meet the revenue requirements of the Company.

7. Based on the adjustments approved herein and the increase in rates approved herein, the appropriate operating margin for Tega Cay on its South Carolina operations is 14.41%.

8. The Company's requested modifications to certain terms and conditions of service in its rate schedule is in the public interest. The appropriate bond requirement for the Company is \$700,000.

IT IS THEREFORE ORDERED THAT:

1. Tega Cay is granted the opportunity to earn a rate of return on rate base for its water and sewer operations in South Carolina of 8.75%.

2. The schedule of rates and charges attached hereto as Appendix A, which include the Company's proposed modifications, are hereby approved for service rendered on or after the date of this Order. Further, the schedules are deemed to be filed with the Commission pursuant to S.C. Code Ann. Section 58-5-240.

3. Should the schedules approved herein and attached hereto as Appendix A not be placed in effect until three (3) months from the effective date of this Order, the schedules shall not

be charged without written permission from the Commission.

4. Tega Cay shall maintain its books and records for water and sewer operations in accordance with the NARUC Uniform System of Accounts for Class A Water and Sewer Utilities, as adopted by this Commission.

5. Tega Cay shall post with this Commission a bond with a face value of \$700,000 to satisfy the findings in this Order within ninety (90) days of receipt of this Order.

6. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

David A. Wright, Chairman

ATTEST:

Randy Mitchell, Vice Chairman

(SEAL)